

Notice of Allowability	Application No.	Applicant(s)	
	10/647,170	TAKABAYASHI, TOSHIYUKI	
	Examiner	Art Unit	
	Susan W. Berman	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 10/19/2005.
2. ☒ The allowed claim(s) is/are 1,3,4,6,8,9,11 and 12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>10/13</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/19/2005 has been entered.

Election/Restrictions

Claims 13-20, drawn to a non-elected invention, have been canceled.

Response to Amendment

Claims 1, 6 and 11 are amended to recite a viscosity from 7 to 50 mPa.s at 25⁰C. The rejection of claims under 35 U.S.C. 102(b) as being anticipated by SMITH (4,394,403) is withdrawn. Smith teaches using the disclosed compositions as inks in graphic arts but does not mention providing compositions for ink jet printing or having a viscosity of 7 to 50 mPa.s at 25⁰C. The rejection of claims under 35 U.S.C. 102(e) as being anticipated by SASAKI et al (6,794,451) is withdrawn. Sasaki et al do not provide motivation to selecting compositions comprising oxetanes of the formula set forth in the instant claims or having viscosities as low as 7 to 50 mPa.s at 25⁰C. The provisional rejection of claims under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of copending Application No. 10/648579 (Publication No. 2004/0052968) in view of Smith or Sasaki et al is withdrawn.

Response to Arguments

Applicant argues that Hirai '074 was commonly owned at the time the inventions were made and is still commonly owned by Konica Corporation. This argument is persuasive and the rejections over Hirai '074 are withdrawn.

Allowable Subject Matter

Claims 1, 3, 4, 6, 8, 9 and 11-12 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record and otherwise known to the examiner does not teach or suggest compositions comprising an oxetane compound I of the formula set forth in claim 1 wherein R_{3-6} are not simultaneously hydrogen and wherein the compositions has the recited viscosity. The differences from the closest art are set forth below.

HIRAI (6,846,074), commonly assigned at the time of the inventions, disclose compositions having a viscosity for ink jet printing comprising an oxetane compound of similar formula 1 wherein substituents corresponding to R_{3-6} in the instant claims are all hydrogen.

Smith teaches compositions comprising oxetane compounds encompassing those set forth in the instant claims and being useful as inks in graphic arts. However, Smith does not provide motivation to select oxetane compounds corresponding to the formula set forth in claim 1 wherein R_{3-6} are not simultaneously hydrogen. Furthermore, Smith do not mention providing compositions for ink jet printing or having a viscosity of 7 to 50 mPa.s at 25°C.

SASAKI et al (6,794,451) disclose compositions having a viscosity of 20 Pa.s or below comprising oxetane compounds wherein the oxetane formula disclosed encompasses the oxetane compounds set forth in the instant claims. Table 3 discloses viscosities of 1500-7300 mPa.s. Sasaki et al do not suggest selecting oxetanes corresponding to the formula set forth in claim 1 wherein R_{3-6} are not

Art Unit: 1711

simultaneously hydrogen. Sasaki et al do not suggest selecting compositions having viscosities as low as 7 to 50 mPa.s at 25°C.

Maeda et al (6,805,439) discloses ink compositions comprising photo-cationic polymerizable compounds and a photo-cationic initiator. Oxetane compounds, not including those set forth in the instant claims, are taught in columns 5-10. The viscosities for ink jet printing are from 2 to 30 cps (column 16, lines 11-14).

Ushirogouchi et al (6,959,986) discloses a liquid ink comprising a photogenerating agent and having a viscosity of 50 mPa.s or less. Ushirogouchi et al teach that aromatic oxetanes can be used to obtain a high printing rate and should be used in combination with an aliphatic or alicyclic oxetane to reduce the viscosity. See the Abstract, column 5, lines 28-39, column 24, line 33, to column 25, line 21.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W. Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB
12/23/2005



Susan W Berman
Primary Examiner
Art Unit 1711